

**REMARKS**

**Status of the Application**

Claims 1-14 are the claims that have been examined in the instant application. Claims 1 and 5-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Soga et al. (U.S. Publication No. 2006/0061974). Claims 2, 9-12 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Jairazbhoy et al. (U.S. Publication No. 2002/0000331). Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga in view of Jairazabhooy. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Jairazbhoy in view of Soga.

By this Amendment, Applicants are amending claim 1 and canceling claim 3.

**Prior Art Rejections**

*A. Claims 1 and 5-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Soga et al. (U.S. Publication No. 2006/0061974).*

*B. Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga in view of Jairazabhooy.*

Claim 1 has been amended to state that “wherein the substrate is made of a material selected from the group consisting of silicon and ceramic.” Applicants respectfully submit that amended claim 1 recites patentable subject matter, as Soga fails to teach or suggest that the substrate may consist of one of silicon and ceramic. Rather, Soga discloses that the substrate be

made of  $\text{Al}_2\text{O}_3$ . Since  $\text{Al}_2\text{O}_3$  is neither silicon or ceramic, Soga fails to disclose this aspect of claim 1 and claim 1 is patentable over Soga.

Further, because amended claim 1 recites elements similar to those noted in now canceled claim 3, the obviousness rejection of claim 3 will be addressed as well.

The Examiner alleges that FIG. 12 of Jairazbhoy discloses that a metal substrate 80. However, claim 1 recites that the substrate is one of a silicon and a ceramic. Because Jairazbhoy fails to disclose that the substrate 80 is either silicon and ceramic, Jairazbhoy fails to cure the deficient disclosure of Soga, and claim 1 is patentable over the applied art.

Claims 4-8 are patentable at least by virtue of their dependency from claim 1.

*B. Claims 2, 9-12 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Jairazbhoy et al. (U.S. Publication No. 2002/0000331).*

Applicant respectfully submits that claim 2 is patentable over Jairazbhoy. Element 99, which the Examiner alleges corresponds to the second bonding material, is not disposed in a pattern on the bonded element. Rather, element 99 is a formation of solder joints which are created after the component is disposed atop the bumps 16. See paragraph [0043] of Jairazbhoy. Thus, Jairazbhoy fails to disclose a second bonding material as recited in claim 2. Thus, claim 2 is patentable over Jairazbhoy as Jairazbhoy fails to disclose the recited second plurality of metal bonding film shapes being disposed in a pattern on a bonded element.

Claims 9-12 and 14 are patentable at least by virtue of their dependency from claim 2.

*Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Jairazbhoy in view of Soga.*

Claim 13 is dependent from claim 2. Because Jairazbhoy fails to disclose all of the elements of claim 1, and because Soga fails to cure the deficient disclosure of Jairazbhoy, claim 12 is patentable over the applied art.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Dion R. Ferguson/  
Dion R. Ferguson  
Registration No. 59,561

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: October 31, 2007